

AMENDMENTS TO THE CLAIMS

Please **CANCEL** claims 1 – 22.

Please **ADD** claims 23 – 47.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 22. (Canceled).

23. (New) A method for loading a fibrous suspension containing cellulose fibers with calcium carbonate, comprising:

introducing one of aqueous calcium hydroxide, dry calcium hydroxide and calcium oxide into the fibrous suspension;

introducing gaseous carbon dioxide into the fibrous suspension; and

precipitating the calcium carbonate in spherical agglomerations of crystals by the carbon dioxide.

24. (New) The method of claim 23, wherein a process temperature for the precipitating is between 20 and 60°C.

25. (New) The method of claim 23, further comprising:

precipitating cubic or rhombohedral crystals; and

agglomerating the cubic or rhombohedral crystals to form the spherical agglomerations.

26. (New) The method of claim 23, further comprising a beating process, wherein the fibrous suspension is beaten during the loading.

27. (New) The method of claim 26, wherein a beating energy of the beating process is between 0.1 and 300 kW/h per ton of dry paper stock.

28. (New) The method of claim 26, further comprising washing the fibrous suspension at least one of before the precipitation process, before the beating process, during the beating process, and after the beating process.

29. (New) The method of claim 23, further comprising directing the fibrous suspension into at least one of a headbox vat arranged downstream in a flow direction of the fibrous suspension and a machine for the further processing of the fibrous suspension after the introducing of the calcium hydroxide or the calcium oxide and the introducing of the carbon dioxide.

30. (New) The method of claim 23, further comprising:

directing the fibrous suspension into a press arrangement structured and arranged for pressing out a filtrate of the fibrous suspension; and

feeding at least a portion of the filtrate back into an arrangement structured and arranged for slushing or diluting the fibrous suspension.

31. (New) The method of claim 30, wherein the arrangement structured and arranged for slushing or diluting the fibrous suspension comprises at least one of a holding tank, a receiver vat and a storage container, on an input side.

32. (New) The method of claim 30, wherein, at least in the arrangement structured and arranged for slushing or diluting the fibrous material, a pH value is maintained between 6 and 11.5.

33. (New) The method of claim 32, wherein the pH value is maintained between 8.5 and 10.5.

34. (New) The method of claim 23, wherein the fibrous suspension comprises an aqueous fibrous material.

35. (New) The method of claim 23, wherein the fibrous suspension comprises an aqueous paper stock having a consistency of between 0.1 to 20%.

36. (New) The method of claim 23, further comprising mixing the one of the aqueous calcium hydroxide, the dry calcium hydroxide and the calcium oxide with the fibrous suspension, wherein the fibrous suspension has a solid material proportion between 0.01 and 60% of a dry paper mass.

37. (New) The method of claim 36, wherein the mixing occurs in at least one of a mixing device, a static mixer and a receiver vat.

38. (New) The method of claim 36, further comprising reacting the one of the aqueous calcium hydroxide, the dry calcium hydroxide and the calcium oxide for a reaction time between 0.01 and 10 minutes.

39. (New) The method of claim 38, wherein the reaction time is between 1 second and 3 minutes.

40. (New) The method of claim 23, further comprising mixing dilution water into the fibrous suspension before, during or after at least one of:

the introduction of the carbon dioxide; and

the introduction of the one of the aqueous calcium hydroxide, the dry calcium hydroxide and the calcium oxide.

41. (New) The method of claim 23, wherein the precipitating is performed in a reactor, wherein the reactor is at least one of a mixing device, a crystallizer, a refiner for performing an LC beating or an HC beating, a disperger and a fluffer FLPCC reactor, and

wherein the fibrous material content is between 0.01 and 15% with the mixing device, between 2 and 40% with the refiner and with the disperger, between 2 and 8% with the LC beating, between 20 and 35% with the HC beating, and between 15 and 60% with the fluffer FLPCC reactor.

42. (New) The method of claim 23, wherein the precipitating process comprises inputting an energy of between 0.3 and 8 kWh/t.

43. (New) The method of claim 23, wherein the loading of the fibrous suspension with the calcium carbonate is performed using at least one of static, mobile and rotating mixing elements.

44. (New) A device for loading a fibrous suspension containing cellulose fibers with calcium carbonate, comprising:

a reactor for performing a precipitation process, wherein the reactor is at least one of:

a mixing device;

a crystallizer reactor;

a refiner;

a disperger; and

a fluffer FLPCC reactor.

45. (New) The device of claim 44, further comprising:

a mixing device structured and arranged to mix the fibrous suspension with one of aqueous calcium hydroxide, dry calcium hydroxide and calcium oxide; and

a dewatering screw, wherein the mixing device is arranged upstream of the dewatering screw in a flow direction of the fibrous suspension.

46. (New) The device of claim 44, further comprising:

a dewatering screw;

a receiver vat;

a storage container;

another upstream device structured and arranged for preparing the fibrous suspension;

and

a line structured and arranged to feed back filtrate of the fibrous suspension obtained in the dewatering screw to at least one of the receiver vat, the storage container and the another upstream device.

47. (New) The device of claim 44, further comprising a washing device structured for cleaning the fibrous suspension and arranged downstream the reactor in a flow direction of the fibrous material.